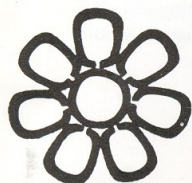


INSTALLATION INSTRUCTIONS  
AND  
PARTS LIST



*Chambers*  
C O R P O R A T I O N

ELECTRIC SURFACE UNIT

*Chambers*  
CHAMBERS CORPORATION • SUBSIDIARY OF RANGAIRE CORPORATION  
OXFORD, MISSISSIPPI 38655 TELEPHONE 601-234-3131

**MODEL**  
**ESU-33-A**  
**ESU-33-C**

## GENERAL INFORMATION

The installation of this Chambers Surface Unit must conform to the standards of the National Electric Code. Your local power company will enforce the code and any information can be obtained from them. The installation of the unit should also agree with local codes and utility requirements.

Read these installation instructions thoroughly. Follow the instructions carefully to insure satisfactory operation and prevent serious or even fatal electrical shock. Failure to provide proper grounding increases the possibility of electrical shock. Always shut off the electrical supply before you work on the unit. This safety measure will prevent electrical shocks or burns. Never work on the wiring before the unit is positively grounded.

Follow a regular schedule for normal care and cleaning to assure efficient and safe operation of your surface unit. A competent electrician should install your unit as he is familiar with National and Local Codes. The wiring diagram located in this manual will be needed by the electrician in connecting your surface unit and also by the serviceman should service be required in the future.

### 1. CABINET CONSTRUCTION

The first item necessary in the installation of your unit will be an appropriate cabinet. A competent carpenter should install the cabinet. Special care should be taken in laying out and cutting the opening in the cabinet top. The dimensions shown in Figure 1 should be followed closely.

After the cabinet opening is complete place the cooktop in the opening and secure with the bolts, clamps, and sleeves furnished. With the bolts in place and the flange of the burner box resting on the counter top the clamps and sleeves are installed from the underside of the counter top. See Figure 2.

To eliminate the hazard of reaching over heated surface units, cabinet storage space located above the surface units should be avoided. If cabinet storage is to be provided, the hazard can be reduced by installing a range hood that projects horizontally a minimum of 5 inches beyond the bottom of the cabinets.

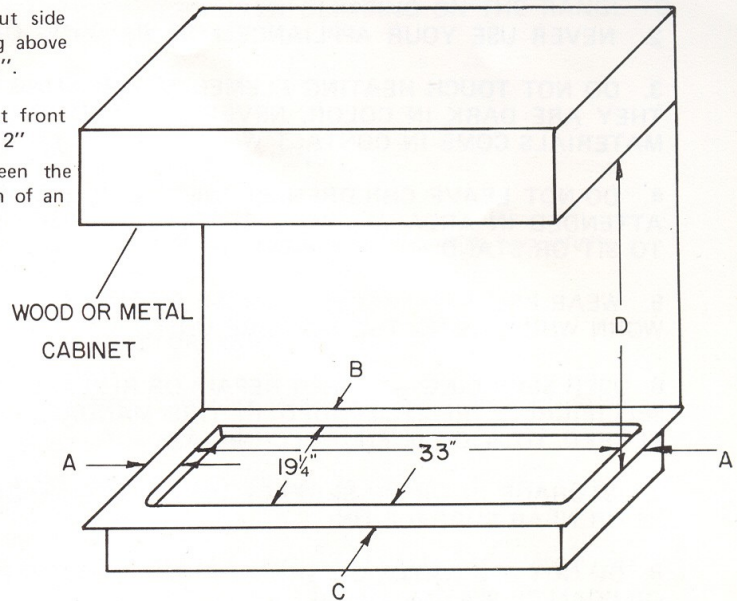
### 2. ELECTRICAL CONSTRUCTION

This unit is equipped with 4 foot length of conduit. It will be necessary to supply an appropriate 240 volt junction box as shown in Figure 3. The installation should be done by a competent electrician. The junction box must be connected to a 240 volt single phase A.C. two wire grounded electrical system. The maximum load of the cooking top unit is 6700 Watts or 28 amps at 240 volts. This unit must be installed in accordance with applicable local codes or in accordance with the latest edition of the National Electric Code where no local codes are applicable.

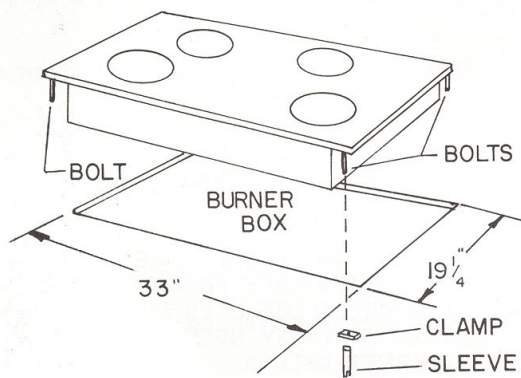


# CUT-OUT DIMENSIONS AND INSTALLATION INFORMATION

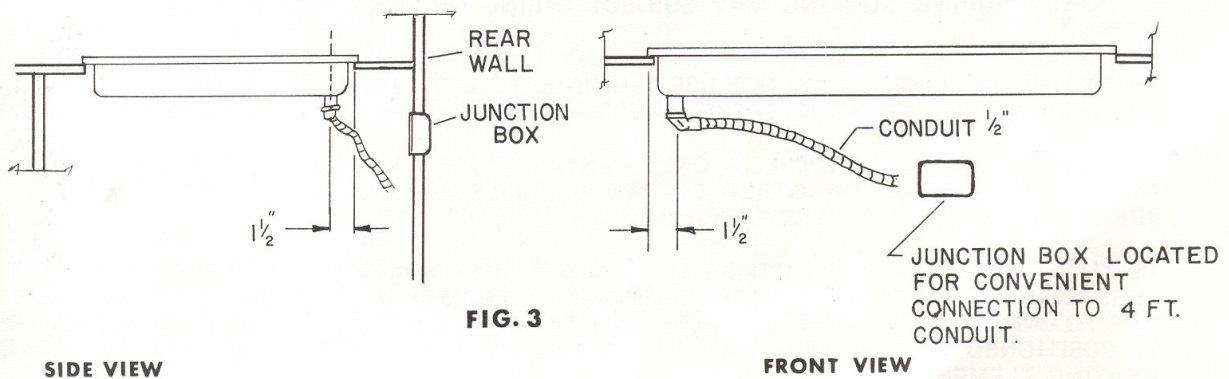
- NOTE: 1. Minimum horizontal dimension from cut-out side and rear to nearest vertical walls extending above the cooking surface are:  $A = \frac{3}{4}"$   $B = \frac{3}{4}"$ .
2. Minimum horizontal dimension from cut-out front to the front edge of the cabinet is:  $C = 2"$
3.  $D = 30$  inches minimum clearance between the top of the cooking surface and the bottom of an unprotected wood or metal cabinet.



**FIG. 1**



**FIG. 2**



## SAFETY INSTRUCTIONS

1. PROPER INSTALLATION — BE SURE YOUR APPLIANCE IS PROPERLY INSTALLED AND GROUNDED BY A QUALIFIED TECHNICIAN.
2. NEVER USE YOUR APPLIANCE FOR WARMING OR HEATING THE ROOM.
3. DO NOT TOUCH HEATING ELEMENTS — HEATING ELEMENTS MAY BE HOT EVEN THOUGH THEY ARE DARK IN COLOR, NEVER LET CLOTHING, POTHOLDERS, OR OTHER FLAMMABLE MATERIALS COME IN CONTACT WITH HEATING ELEMENTS.
4. DO NOT LEAVE CHILDREN ALONE — CHILDREN SHOULD NOT BE LEFT ALONE OR UN-ATTENDED IN AREA WHERE SURFACE UNIT IS IN USE. THEY SHOULD NEVER BE ALLOWED TO SIT OR STAND ON ANY PART OF THE SURFACE UNIT.
5. WEAR PROPER APPAREL — LOOSE FITTING OR HANGING GARMENTS SHOULD NEVER BE WORN WHILE USING THE SURFACE UNIT.
6. USER SERVICING — DO NOT REPAIR OR REPLACE ANY PART OF THE SURFACE UNIT UNLESS SPECIFICALLY RECOMMENDED IN THIS MANUAL. ALL OTHER SERVICING SHOULD BE REFERRED TO A QUALIFIED TECHNICIAN.
7. STORAGE IN OR ON SURFACE UNIT — FLAMMABLE MATERIAL SHOULD NOT BE STORED IN OR NEAR SURFACE UNITS.
8. DO NOT USE WATER ON GREASE FIRES — SMOTHER FIRE OR FLAME OR USE DRY CHEMICAL OR FOAM-TYPE EXTINGUISHER.
9. USE ONLY DRY POTHOLDERS — MOIST OR DAMP POTHOLDERS ON HOT SURFACES MAY RESULT IN BURNS FROM STEAM. DO NOT LET POTHOLDER TOUCH HOT HEATING ELEMENTS. DO NOT USE A TOWEL OR OTHER BULKY CLOTH.
10. USE PROPER PAN SIZE — THIS SURFACE UNIT IS EQUIPPED WITH TWO DIFFERENT SIZED HEATING ELEMENTS. SELECT UTENSILS HAVING FLAT BOTTOMS LARGE ENOUGH TO COVER THE SURFACE UNIT HEATING ELEMENT. THE USE OF UNDERSIZED UTENSILS WILL EXPOSE A PORTION OF THE HEATING ELEMENT TO DIRECT CONTACT AND MAY RESULT IN IGNITION OF CLOTHING, PROPER RELATIONSHIP OF UTENSIL TO BURNER WILL ALSO IMPROVE EFFICIENCY.
11. NEVER LEAVE SURFACE UNITS UNATTENDED AT HIGH HEAT SETTINGS — BOIL-OVER CAUSES SMOKING AND GREASY SPILL-OVERS THAT MAY IGNITE.
12. MAKE SURE REFLECTOR PANS OR DRIP BOWLS ARE IN PLACE. ABSENCE OF THESE PANS OR BOWLS DURING COOKING MAY SUBJECT WIRING OR COMPONENTS UNDERNEATH TO DAMAGE.
13. PROTECTIVE LINERS — DO NOT USE ALUMINUM FOIL TO LINE SURFACE UNIT DRIP BOWLS. IMPROPER INSTALLATION OF THESE LINERS MAY RESULT IN A SHOCK OR FIRE HAZARD.
14. GLAZED COOKING UTENSILS — ONLY CERTAIN TYPES OF GLASS, GLASS/CERAMIC, CERAMIC, EARTHENWARE, OR OTHER GLAZED UTENSILS ARE SUITABLE FOR USE WITHOUT BREAKING DUE TO THE SUDDEN CHANGE IN TEMPERATURE.
15. UTENSIL HANDLES SHOULD BE TURNED INWARD AND NOT EXTEND OVER ADJACENT SURFACE UNITS — TO MINIMIZE BURNS, IGNITION OF FLAMMABLE MATERIALS, AND SPILLAGE DUE TO UNINTENTIONAL CONTACT WITH THE UTENSIL, THE HANDLE OF THE UTENSIL SHOULD BE POSITIONED SO THAT IT IS TURNED INWARD, AND DOES NOT EXTEND OVER ADJACENT HEATING ELEMENT.



16. DO NOT SOAK REMOVABLE HEATING ELEMENTS – HEATING ELEMENTS SHOULD NEVER BE IMMERSSED IN WATER.

17. CAUTION: DO NOT STORE ITEMS OF INTEREST TO CHILDREN IN CABINETS ABOVE A RANGE OR ON THE BACKGUARD OF A RANGE – CHILDREN CLIMBING ON THE RANGE TO REACH ITEMS COULD BE SERIOUSLY INJURED.

### OPERATING AND COOKING SUGGESTIONS

Models ESU-33-A and ESU-33-C feature two 2100 watt units and two 1250 watt units. The switches have infinite positions ranging from "Hi", Highest, to "Lo", Simmer or lowest heat.

#### THERMAL EYE CONTROL ADJUSTMENT FOR MODEL ESU-33-C

The Thermal Eye Control comes from the factory preadjusted, If for some reason calibration is incorrect, follow instructions for adjustment.

1. Place an aluminum utensil, same size as the heating element with approximately 1" of water. (Use oil if calibration above 200 is desired.)
2. Place a reliable mercury thermometer in the utensil and turn thermal eye knob to 200° setting on dial.
3. After thermometer reading has become constant, the control should be calibrated if your reading is not within 190° and 210°.
4. If calibration is required, remove knob. While holding stem firmly, turn screw inside the stem clockwise to obtain lower temperature or counterclockwise for higher temperatures. (¼ turn - approximately 25°)
5. Try new calibration several times to insure adjustment is correct.

#### LISTED BELOW ARE SOME RECOMMENDED SUGGESTIONS FOR BETTER COOKING RESULTS

1. Use cooking utensils with flat bottoms, straight sides and tight fitting covers.
2. Reflected heat from utensils larger than the outside edge of the heating element may damage the top and drip pans. Use only the correct size utensils.
3. Use "Hi" position to start vegetables cooking. When steaming, turn the switch to the lower position which keeps foods cooking gently.
4. If the utensil has a tight fitting cover, as suggested, only about ¼" depth of water need be used. Again, reduce the heat after steaming starts.

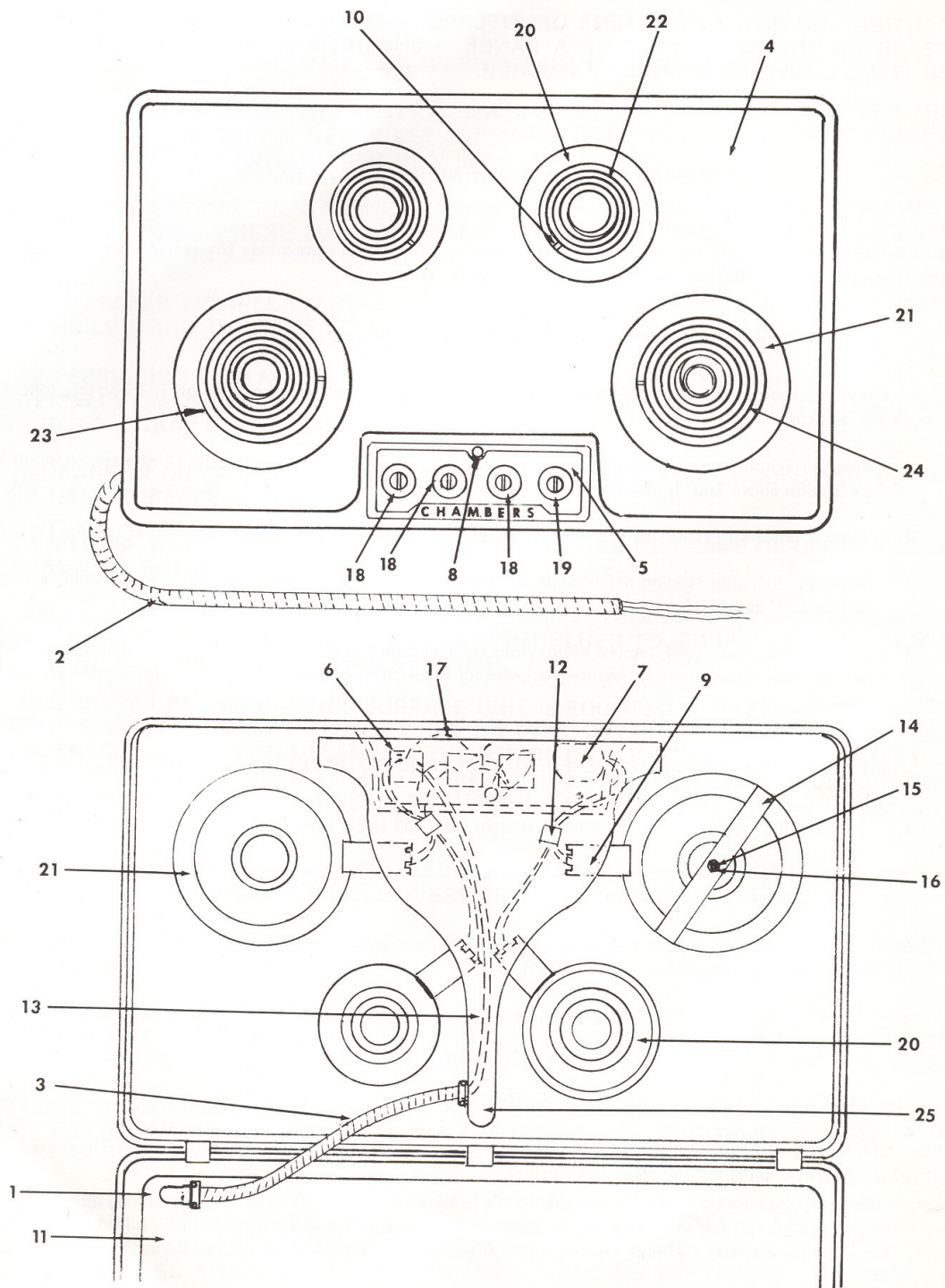
### CLEANING

To obtain maximum results and keep the "brand new" appearance, the unit should be cleaned each day. The following suggestions will help in keeping the unit clean and efficient.

The burner bowls can be cleaned by lifting one side of the heating element and pulling firmly to unplug element. The surface unit has a hinged top for easy cleaning. To clean inside of unit, check all switches to make sure they are in off position. Then raise cooking top and pull support rod into position to hold cooking top up. Burner box can then be easily cleaned.

All switches must be at off position before cleaning burner units.

ILLUSTRATION FOR MODEL ESU-33-C





# CHAMBERS ELECTRIC SURFACE UNIT

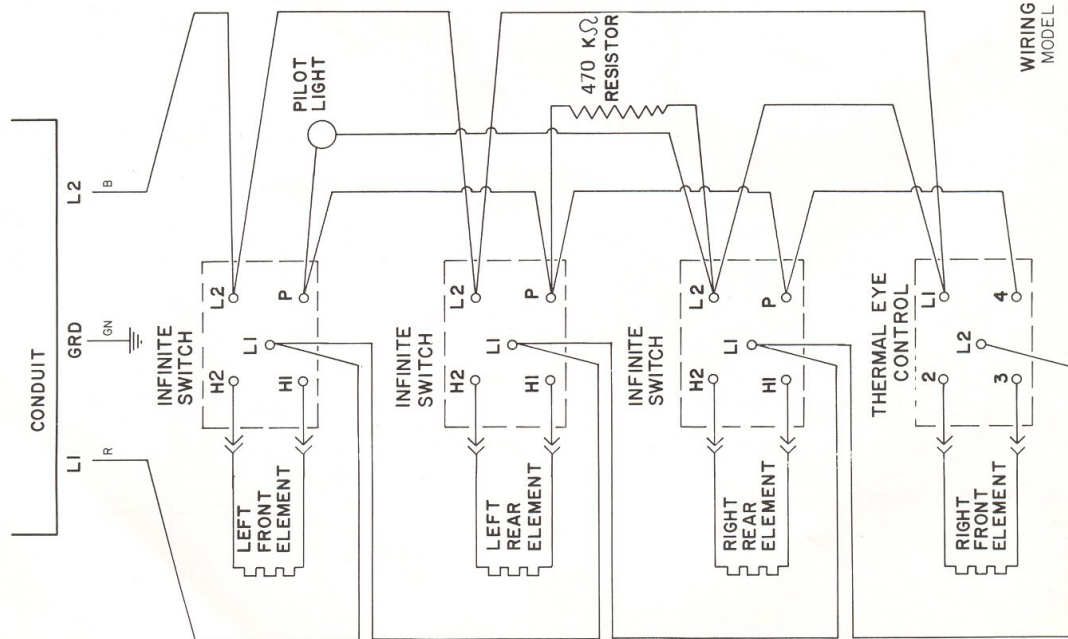
MODEL ESU-33-A; ESU-33-C

## PARTS LIST

KEY NO.	DESCRIPTION	PART NO. MODEL ESU-33-A	PART NO. MODEL ESU-33-C
1	½" 90 Conduit Connector	7065	7065
*	Conduit Connecting Nut	10371-1	10371-1
2	½" Flexible Conduit (48 inches)	8167	8167
3	½" Flexible Conduit (13¾")	8167-1	8167-1
4	Cooking Top	-----	-----
	Sparkling White	19677	19677
	Mocha Coffee	19678	19678
	Fresh Avocado	19676	19676
	Golden Harvest	19675	19675
	Almond Cream	19679	19679
	Satin Chrome	19674	19674
5	Nameplate	12733	12733
6	Switch	14191	14191
7	Thermal Eye Control		14192
8	Signal Light	9928	9928
9	Element Receptacle	14187	14187
10	Terminal Block Mounting Screw	07128	07128
11	Burner Box	10925	10925
12	Wiring Harness - Elements	14156	14156
13	Wiring Harness - Leads	13153	13153
14	Thermal Eye Sensor Bracket		14135
15	Sensor Element Holding Fitting		6543
16	3/8" Hex Nut		7078
17	Signal Light Jumper Harness	7964-2	14190
18	Knob	13871	13871
19	T/Eye Knob		13872
20	Burner Bowl 6"	14189	14189
21	Burner Bowl 8"	14188	14188
22	Element 6" - 1250 Watt	14183	14182
23	Element 8" - 2100 Watt	14185	14184
24	Element Thermal Eye - 2100 Watt		14186
*	Ground Lug	7047	7047
*	Ground Lug Screw	7000	7000
*	Switch Nut	13152	13152
*	Resistor	7978	7978
25	Switch Cover	13154	13154
*	Rubber Grommet	8585	8585
*	Installation Instructions & Parts List	14193	14193

\* Parts Not Illustrated

# HOOK-UP DIAGRAM

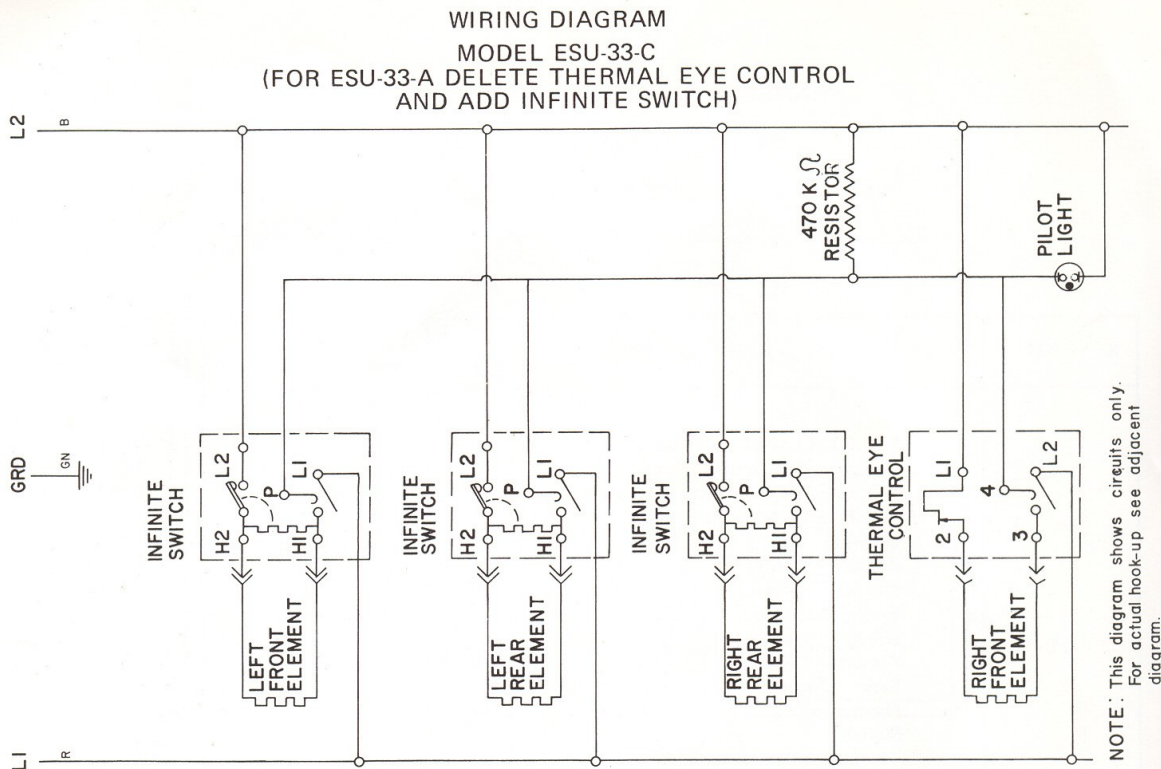


NOTE: Components may not appear as drawn-follow terminal number designation in making hook-up.

B-BLACK  
R-RED  
GN-GREEN

# WIRING DIAGRAM MODEL ESU-33-C

# SCHEMATIC DIAGRAM



NOTE: This diagram shows circuits only. For actual hook-up see adjacent diagram.



### HOW TO ORDER REPAIR PARTS

The Model Number for your surface unit is on a plate located inside the burner box. Always mention Model Number when requesting service or repair parts for your surface unit.

WHEN ORDERING REPAIR PARTS, ALWAYS GIVE THE FOLLOWING INFORMATION.

1. The PART NUMBER
2. The PART DESCRIPTION
3. The MODEL NUMBER of your surface unit
4. The NAME of the ITEM Electric Surface Unit



## CHAMBERS CORPORATION

### LIMITED WARRANTY

Please read this warranty carefully. This warranty gives you specific legal rights, and you may also have other rights that vary from state to state.

#### LIMITED ONE YEAR WARRANTY ON THE FUNCTIONING OF ALL PARTS EXCEPT GLASS PARTS

If, within one year from date of installation, any part, other than a glass part, fails to function properly due to a defect in material or workmanship, Chambers will either repair the part or furnish a replacement part free of charge. This warranty does not cover cost of labor.

#### LIMITED 30-DAY WARRANTY ON GLASS PARTS AND FINISH OF PORCELAIN ENAMEL, PAINTED OR BRIGHT METAL FINISHED PARTS

If, within 30 days from date of installation, any glass part or the finish on any porcelain enamel, painted or bright metal parts is defective in material or workmanship, Chambers will furnish a replacement part free of charge. This warranty does not cover cost of labor.

#### RETURN OF WARRANTY REGISTRATION CARD

In order for your Chambers product to be covered by this warranty, you must return the enclosed Warranty Registration Card to Chambers within **thirty** (30) days after installation.

#### EXCLUSIONS

This warranty does not apply if this product is installed for commercial use. This warranty does not cover damage to the product resulting from (or service required due to) improper installation, misuse, abuse or neglect. ALL IMPLIED WARRANTIES (INCLUDING IMPLIED WARRANTIES OF MERCHANTABILITY) ARE HEREBY LIMITED IN DURATION TO THE ONE YEAR PERIOD OF THIS WARRANTY. THIS WARRANTY EXCLUDES LIABILITY FOR ANY AND ALL CONSEQUENTIAL DAMAGES WHICH MAY RESULT FROM ANY USE OR MALFUNCTION OF THE WARRANTED APPLIANCE. Some states do not allow the exclusion or limitation of incidental or consequential damages or limitations on how long an implied warranty lasts, so the above limitations and exclusions may not apply to you.

#### WARRANTY SERVICE

Parts under these warranties may be obtained by contacting your nearest Chambers Dealer, Distributor, or Service Agency.

If parts are unavailable from any of the above, contact Chambers Corporation, Service Department, P. O. Box 927, Oxford, MS 38655.